



Ministry
of the
Environment

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Minister

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about pesticides

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THE PROPER USE OF THE HERBICIDE 2,4-D BY LICENCED APPLICATORS

It is the responsibility of licenced operators and applicators to ensure that all personnel handling pesticides do so using proper safety precautions. It is also their duty to advise homeowners and tenants, whose property is being treated, of measures to be taken to safeguard their health and that of their pets.

The following paragraphs outline essential safety practices which must be followed.

GOOD PRACTICES FOR THE SAFE HANDLING AND APPLICATION OF 2,4-D

1. Pesticide Information

The Registered label is the final authority for the use of a pesticide. Before applying pesticides, READ THE PRODUCT LABEL AND MATERIAL SAFETY DATA SHEET, which should be available at all times to the applicator.

2. Personal Protective Equipment

Take precautions to avoid skin and eye contact by wearing a long-sleeved shirt, long pants and/or coveralls, rubber boots, and a visor or goggles. An organic vapour cartridge respirator can be used if available.

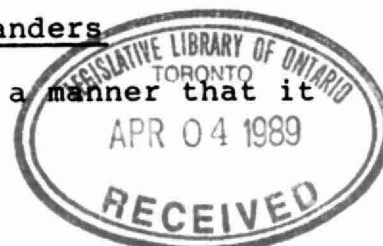
Butyl, fluoro-elastomer or neoprene gloves should be worn while mixing and applying the herbicide.

3. Personal Hygiene

Do not eat, drink or smoke while handling and applying 2,4-D. Do not touch or wipe eyes, forehead or lips, or other parts of your body with hands or clothing which may have been contaminated with herbicide. Change clothing after spraying, especially outer clothing which should be washed in hot water separately from other garments before re-use. Wash hands and face after pesticides are handled and before break periods or lunch. Avoid eating, drinking or smoking when working with pesticides.

4. Protection of Other Workers and/or Bystanders

No person may apply a pesticide in such a manner that it



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contaminates the body or clothing of any worker or bystander. It is suggested that warning signs be posted at normal points of worker or public entry to the area which has been sprayed.

5. Emergency Procedures

Make sure that emergency facilities, such as wash water, are at hand in case an accident should occur.

6. Environmental Conditions

Spray 2,4-D at low pressure (210 kPa) during warm weather when weeds are young and growing actively. Spray during calm periods of the day. Do not spray when wind is blowing at over 11 km/h (7 mph). Avoid spraying if rain is forecast within 24 hours. Do not apply 2,4-D in such a manner that any water source could be contaminated. Consider the use of drift control agents.

7. Supervision

The Pesticides Act and Regulation requires that supervisors must routinely check on all applicators to ensure that proper safety precautions are being taken. Unlicensed applicators must be checked a minimum of once per day on the application site.

8. Application Practices

When applying 2,4-D to areas frequented by the public, spray at a time of day when the area is not in use and pets are not present. It is recommended that the area should be posted. When applying 2,4-D to private property the owner must be advised of any necessary precautions. If possible, advise owner's ahead of time to prepare the lawn by removing garden furniture, childrens' or pets' toys, etc. and request that adults, children and pets be kept off the grass until the herbicide has dried.

9. Calibration, Maintenance and Operation of Equipment

Ensure that the application equipment is calibrated and in safe operating condition before use. Use pressures, nozzle types and spray angles that are recommended or required to minimize contamination problems from drift. Do not handle equipment in an unsafe manner.

10. Transportation

Pesticides, including herbicides, must not be transported with food, drink, feed, fertilizer, seed, toiletries, clothing, bedding or similar commodities unless they are separated in such a manner as to prevent their contamination by the pesticide(s). Pesticides should be transported by a road vehicle only if they are secured in such a manner as to prevent their escape or discharge.

11. Backflow Device

Equipment used for filling spray tanks from streams, rivers or other bodies of water must be fitted with a device to prevent backflow.

12. Highway Safety

Workers involved in spray work along or near road rights-of-way must be protected against traffic hazards.

13. Electrical Safety

Sources of electrical power may present a hazard when water-based formulations are sprayed nearby, and should be avoided.

14. Records

A well managed pesticide program includes a record of applications. Proper records cover information on the site, nature of the application, and dates of application and permissible re-entry.

15. Disposal

Damaged or leaky containers should be emptied into containers similar to the original ones and labelled in accordance with the original label. Rinse all empty containers and add rinsings to the spray tank. Triple rinsing or jet rinsing are recommended. Puncture the bottoms of containers or crush them. Dispose of the containers in a landfill site approved by the Ministry of the Environment. Return empty drums to a re-cycling depot in your area, if there is one.

16. Regulation 309

The herbicide 2,4-D is considered to be a hazardous waste chemical, Schedule 2, Part B, reference number ON2114, under the Environmental Protection Act, Waste Management General Regulation R.R.O. 1980, Reg. 309. Any amount of left-over 2,4-D material is designated a commercial waste chemical unless it is to be used for its original purpose, in which case it is exempt under Part V of the Environmental Protection Act and Regulation 309. To avoid being registered as a hazardous waste generator, mix only the quantity that you will use during one spraying operation and use any left-over spray mixture or tank rinsing for a registered use of the product.

17. Spills

If you spill 2,4-D on your skin or clothing, immediately remove all contaminated clothing and wash your skin with soap and water. Change into clean clothing. Watch for symptoms of poisoning, and if necessary, go to the nearest hospital immediately. If you spill a small amount on the ground, absorb with sand, earth or other non-

combustible absorbent material, then flush area with soap and water. Place the contaminated absorbent material in a plastic bag and dispose of in a designated sanitary landfill site. If a spill occurs, the Spills Action Centre of the Ministry of the Environment must be notified immediately by calling 1-800-268-6060.

18. Mixing and Loading

It is unsafe and hazardous for workers to lift concentrated pesticide containers up to the top of spray mixing tanks of large applicator units by climbing onto wheels or framework and leaning against the possibly contaminated outside surface of the spray tank. The risk of spilling the concentrate is also high if this unsafe practice is allowed. Provide access steps and a work platform and maintain a clean work area. To further reduce the need to climb to the top of the spray tank to pour in liquid concentrates, consider closed liquid transfer systems utilizing pumps, probes and pipe systems. A closed mixing and loading system provides an air-tight seal between the probe and the access hole in the shipping container, in addition to a built-in rinse system.

19. Cleanup

Ensure soap and water is available for routine clean-up. Shower facilities must be available for mixers, loaders and applicators to wash after spraying ends for the day. Protective equipment must be available in a clean, well-maintained condition prior to each work day or period. Ensure emergency wash facilities are available on the application site.

20. Dislodgeable Residues

Recent studies show that when 2,4-D is applied to turf grass less than 5% of the herbicide is dislodgeable immediately after application. This figure drops to less than 1% after three days and less than 0.01% after seven days. In all cases people and pets should be advised to keep off the lawn until the herbicide has dried.

Remember - apply pesticides:

- ° To a correctly identified pest
- ° Only when necessary
- ° Only where they are needed
- ° In recommended amounts
- ° According to label directions and precautions



**PESTICIDES ARE POISONS -
TREAT THEM AS SUCH**